

WHAT IS CLAIMED IS:

- 1 1. An apparatus, comprising:
2 a first voltage plane;
3 a signal layer on one side of the first voltage plane;
4 a second voltage plane on the other side of the first voltage plane; and
5 a floating trace on the signal layer, wherein the floating trace is electrically
6 connected to the second voltage plane.
- 1 2. The apparatus of claim 1, wherein the first voltage plane is a power plane and
2 the second voltage plane is a ground plane.
- 1 3. The apparatus of claim 1, wherein the first voltage plane is a ground plane and
2 the second voltage plane is a power plane.
- 1 4. The apparatus of claim 1, wherein the signal layer includes a plurality of
2 floating traces, each floating trace being (i) electrically connected to the second voltage
3 plane and (ii) not directly connected to other floating traces on the signal layer.
- 1 5. The apparatus of claim 1, wherein the floating trace and the second voltage
2 plane are electrically connected via a plated through hole.
- 1 6. The apparatus of claim 1, wherein the floating trace is a microstrip line.

1 7. The apparatus of claim 6, wherein the microstrip line provides impedance
2 damping.

1 8. The apparatus of claim 6, wherein the microstrip line reduces resonance
2 between the first voltage plane and the second voltage plane.

1 9. The apparatus of claim 1, wherein the first voltage plane, the signal layer, and
2 the second voltage plane are separated by a dielectric material.

1 10. The apparatus of claim 1, wherein the apparatus is a printed circuit board.

1 11. The apparatus of claim 10, wherein the printed circuit board is associated
2 with at least one of: (i) a flip chip ball grid array package model, and (ii) a pin grid array
3 package model.

1 12. The apparatus of claim 1, further comprising:
2 a second signal layer.

1 13. The apparatus of claim 12, further comprising:
2 a second floating trace on the second signal layer.

1 14. A method, comprising:
2 providing a first voltage plane;
3 providing a signal layer on one side of the first voltage plane;
4 providing a second voltage plane on the other side of the first voltage plane; and

5 providing a floating trace on the signal layer, wherein the floating trace is
6 electrically connected to the second voltage plane.

1 15. The method of claim 14, further comprising:
2 positioning the floating trace in the signal layer to reduce cross-talk with a
3 neighboring signal line.

1 16. The method of claim 14, further comprising:
2 providing a second signal layer; and
3 providing a second floating trace on the second signal layer.

1 17. The method of claim 14, wherein providing the floating trace comprising:
2 providing a microstrip line on the signal layer.

1 18. A printed circuit board, comprising:
2 a signal layer including a plurality of microstrip lines that are not electrically
3 connected to each other on the signal layer;
4 a power plane under the signal layer and separated from the signal layer by a
5 dielectric material;
6 a ground plane under the power plane and separated from the power plane by the
7 dielectric material,
8 wherein each of the microstrip lines is (i) electrically connected to the ground
9 plane via a plated through hole passing through the dielectric material and the power
10 plane and (ii) not directly connected to other microstrip lines on the signal layer.

1 19. The printed circuit board of claim 18, wherein the microstrip lines provide
2 impedance damping and reduce resonance between the power plane and the ground
3 plane.

1 20. A system, comprising:
2 a printed circuit board, including:
3 a first voltage plane,
4 a signal layer on one side of the first voltage plane,
5 a second voltage plane on the other side of the first voltage plane, and
6 a floating trace on the signal layer, wherein the floating trace is electrically
7 connected to the second voltage plane; and
8 a dynamic random access memory unit coupled to the printed circuit board.

1 21. The system of claim 20, further comprising:
2 a processor coupled to the printed circuit board, wherein the processor and
3 dynamic random access memory unit are to exchange information via signal lines on the
4 signal layer.